Safety Data Sheet RNase Cleanup

Section 1 - Chemical Product and Company Identification

SDS Name: RNase Cleanup Catalog Numbers: SO-1322 Company Identification: Transene Company, Inc., DBA ROWLEY BIOCHEMICAL, Inc. 10 ELECTRONICS AVENUE DANVERS, MA 01923 For information, call: 978-739-4883 Emergency Number: 800-424-9300 For CHEMTREC assistance, call: 800-424-9300

Section 2 - Hazards Identification

GHS Classifications

H290-Corrosive to metals: 1 H314-Skin corrosion/irritation: 1B H318-Serious eye damage/eye irritation: 1 H335-Specific target organ toxicity, single exposure; Respiratory tract irritation: 3 H400-Hazardous to the aquatic environment, acute hazard: 1 H411-Hazardous to the aquatic environment, long-term hazard: 2

1% of the mixture consists of ingredients of unknown acute inhalation toxicity.

Pictograms or Hazard symbols and Hazard statement(s):



Signal Word: Danger

Hazard Statements:

H290-May be corrosive to metals H314-Causes severe skin burns and eye damage H318-Causes serious eye damage H335-May cause respiratory irritation H400-Very toxic to aquatic life H411-Toxic to aquatic life with long lasting effects

Precautionary Statements:

P234-Keep only in original packaging.

P260-Do not breathe dusts or mists.

P261-Avoid breathing dust/fume/gas/mist/vapours/spray.

P264-Wash thoroughly after handling.

P271-Use only outdoors or in a well-ventilated area.

P273-Avoid release to the environment.

P280-Wear protective gloves/protective clothing/eye protection/face protection.

P301+P330+P331-If swallowed: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353-If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340-If inhaled: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338-If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310-Immediately call a Poison Center/doctor.

P312-Call a Poison Center/doctor if you feel unwell.

P363-Wash contaminated clothing before reuse.

P390-Absorb spillage to prevent material damage.

P391-Collect spillage.

P403+P233-Store in a well-ventilated place. Keep container tightly closed.

P405-Store locked up.

P406-Store in a corrosion resistant container with a resistant inner liner.

P501-Dispose of contents/container in accordance with local/regional/national/international regulations.

Section 3 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent
7681-52-9	Sodium Hypochlorite	10.4 w/v
1310-73-2	Sodium Hydroxide	1 w/v
144-55-8	Sodium Bicarbonate	0.75 w/v
151-21-3	Sodium Dodecyl Sulfate	0.06 w/v
7732-18-5	Water	Balance

Section 4 - First Aid Measures

Eye Exposure: In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Get medical attention immediately.

Dermal Exposure: In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention.

Oral Exposure: If swallowed, get immediate medical advice. Ingestion causes severe burns, severe swelling, and severe damage to the delicate tissue and danger of perforation of the digestive tract. Do not induce vomiting. Clean mouth with water.

Inhalation Exposure: If inhaled, remove to fresh air. Get immediate medical attention.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating gases may be generated by thermal decomposition or combustion.

Extinguishing Media: Use dry chemical, carbon dioxide, dry sand, water spray, or alcohol-resistant foam.

Hazardous Combustion Products: Carbon oxides, sodium oxides, sulfur oxides, hydrogen chloride gas, irritating and toxic fumes and gases.

Flash Point: Not available Autoignition Temperature: Not available Explosion Limits, Lower: Not available Upper: Not available NFPA Rating: (estimated) Health: 3; Flammability: 0; Instability: 0

Section 6 - Accidental Release Measures

Procedure(s) of Personal Precaution(s):

Wear personal protective equipment. Do not ingest or inhale. Do not get on skin or clothing. Do not get in eyes. Ensure adequate ventilation.

Methods for Cleaning up: Absorb with sand, earth, or vermiculite. Carefully sweep up and containerize for proper disposal. Do not release to the environment. Do not release to drains. Avoid contact with incompatible substances.

Section 7 - Handling and Storage

Use care when handling. Wear personal protective equipment. Wash thoroughly after handling. Ensure adequate ventilation. Do not ingest or inhale. Do not get on skin or clothing. Do not get in eyes. Keep in a tightly closed and non-metal container. Store in a cool, dry, and well-ventilated area. Store in corrosives area away from acids and other incompatible materials.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

Chemical Name	ACGIH - TLV	NIOSH - IDLH	OSHA - Final PELs
Sodium Hypochlorite CAS#7681-52-9	Not listed	Not listed	Not listed
Sodium Hydroxide CAS#1310-73-2	2 mg/m3 Ceiling	2 mg/m3 Ceiling 10 mg/m3 IDLH	2 mg/m3 TWA
Sodium Bicarbonate CAS#144-55-8	Not listed	Not listed	Not listed
Sodium Dodecyl Sulfate CAS#151-21-3	Not listed	Not listed	Not listed

Exposure Limits:

OSHA Vacated PELs: Sodium Hydroxide: 2 mg/m3 Ceiling

Section 9 - Physical and Chemical Properties

Physical State: Liquid **Appearance:** Light yellow **Odor:** Strong bleach-like Vapor Pressure: Not available **Odor Threshold:** Not available Vapor Density: Not available **pH:** Approx. 12.8 **Relative density:** Not available Melting point/freezing point: Not available **Solubility:** Soluble in water **Boiling Point:** Not available Flash point: Not available Evaporation Rate: Not available Flammability (solid, gas): Not available Partition coefficient: n-octanol water: Not available Autoignition Temperature: Not available

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: Incompatible products, ignition sources, and excess heat. Open flame and sparks.

Incompatibilities with Other Materials: Strong oxidizing agents, metals, ammonia, acids, organic materials, chlorinated solvents, aluminum, copper, zinc, tin, phosphorous, organic halogens, alkali metals, amines, powdered metals, aziridine, methanol, and ammonium compounds.

Hazardous Decomposition Products: Carbon oxides, sodium oxides, sulfur oxides, hydrogen chloride gas, irritating and toxic fumes and gases.

Section 11 - Toxicological Information

CAS#7681-52-9 Sodium Hypochlorite:

LD50 Oral: 8.91 g/kg (rat) LD50 Dermal: >20000 mg/kg (rabbit) LC50 Inhalation: >10500 mg/L 1h (rat)

Carcinogenicity: Sodium Hypochlorite CAS#7681-52-9 is not listed by IARC, NTP, ACGIH, OSHA, or California Prop. 65.

CAS#1310-73-2 Sodium Hydroxide: RTECS#: WB4900000

LD50 Oral: 325 mg/kg (rat) LD50 Dermal: 1350 mg/kg (rabbit) LC50 Inhalation: Not available

Draize test, rabbit, eye: 1 mg/24h Severe Damage. Draize test, rabbit, skin: 500 mg/24h Severe Damage.

Carcinogenicity: Sodium Hydroxide CAS#1310-73-2 is not listed by IARC, NTP, ACGIH, OSHA, or California Prop. 65.

CAS#144-55-8 Sodium Bicarbonate: RTECS#: VZ0950000

LD50 Oral: 4220 mg/kg (rat) LD50 Dermal: Not available LD50 Inhalation: >4.74 mg/L 4.5h dust/mist (rat)

Carcinogenicity: Sodium Bicarbonate CAS#144-55-8 is not listed by IARC, NTP, ACGIH, OSHA, or California Prop. 65.

CAS#151-21-3 Sodium Dodecyl Sulfate: RTECS#: WT1050000

LD50 Oral: 977 mg/kg (rat) LD50 Dermal: >2000 mg/kg (rabbit) LC50 Inhalation: 1.51 mg/L 4h dust/mist (expert judgement)

Carcinogenicity: Sodium Dodecyl Sulfate CAS#151-21-3 is not listed by IARC, NTP, ACGIH, OSHA, or California Prop. 65.

Information on the likely routes of exposure: Routes of entry anticipated: oral, dermal, inhalation, and eye.

Epidemiology: Not available.
Teratogenicity: Not available.
Reproductive Effects: Not available.
Developmental Effects: Not available.
Neurotoxicity: Not available.
Mutagenicity: Not available.
Specific Target Organ Toxicity, Single Exposure: Respiratory system.
Specific Target Organ Toxicity, Repeated Exposure: Not available.

Symptoms associated with exposure: Corrosive material. Ingestion may cause swelling, stomach pain, burns of the mouth and throat, as well as danger of perforation of the esophagus and stomach. Eye contact may cause pain, watering, redness, and serious damage. Risk of blindness. Skin contact may cause pain, irritation, burns, redness, and blistering. Inhalation overexposure may cause burns of the mucous membranes, cough, shortness of breath, and respiratory tract damage.

The toxicological properties of this material have not been thoroughly investigated.

Section 12 - Ecological Information

Ecotoxicity: Do not release to the environment. Do not release to drains. Very toxic to aquatic life.

CAS#7681-52-9 Sodium Hypochlorite:

LC50, freshwater fish: 0.08 mg/L 96h (pimephales promelas)(fathead minnow) ErC50, algae: 0.036 mg/L 72h static (psuedokirchneriella subcapitata)(green algae) EC50, water flea: 0.04 mg/L 48h (daphnia magna)

CAS#1310-73-2 Sodium Hydroxide:

LC50, freshwater fish: 45.4 mg/L 96h static (oncorhynchus mykiss)(rainbow trout) LC50, freshwater fish: 125 mg/L 96h (gambusia affinis)(mosquito fish) EC50, water flea: 40.4 mg/L 48h (ceriodaphnia)

CAS#144-55-8 Sodium Bicarbonate:

LC50, freshwater fish: 8250-9000 mg/L 96h static (lepomis macrochirus)(bluegill) EC50, freshwater algae: 650 mg/L 120h

EC50, water flea: 2350 mg/L 48h

CAS#151-21-3 Sodium Dodecyl Sulfate:

LC50, freshwater fish: 29 mg/L 96h flow-through (pimephales promelas)(fathead minnow) ErC50, algae: >120 mg/L 72h static (desmodesmus subspicatus)(green algae) EC50, water flea: 5.55 mg/L 48h flow-through (ceriodaphnia dubia)

Persistence and degradability: Not available.

Bio-accumulative potential: Not available.

Mobility: Will likely be mobile in the environment due to its water solubility.

Section 13 - Disposal Considerations

DISPOSAL: Dispose of in accordance with all federal, state, and local regulations.

Section 14 – Transport Information

DOT

Proper shipping name: Hypochlorite Solutions (Sodium hypochlorite) UN1791 PG III Hazard Class 8

Section 15 - Regulatory Information

Canada Regulatory Information

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the SDS contains all the information required by the CPR.

Section 16 - Additional Information

SDS Creation Date: 3-3-22 **Revision #1:** 8-20-24

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